



CHELASTAR SINGLE ELEMENT CHELATES

CHELASTAR Fe-DTPA 7%

Premium Microgranular Iron Chelate

Suitable for fertigation in high tech soilless systems and for open field irrigation.

1. INTRODUCTION: What is DTPA?

DTPA, short for Diethylene triamine pentaacetic acid complex or for Pentetic acid, protects the Iron molecule against precipitation in a moderate pH range (pH 4 - 7), similar to EDTA and the biodegradable IDHA chelate. The stability constant is moderate to high, **higher than the stability constant of EDTA chelate.** DTPA chelate is specially suitable for hydroponic systems.

2. PRODUCT SPECIFICATIONS

a) Description

Brand name : CHELASTAR Fe-DTPA 7%

Chemical formula : $C_{14}H_{18}N_3O_{10}Na_2Fe$

Chemical name : Diethylenetriaminepentaacetic acid, ferric-disodium complex

Appearance : yellow microgranules

b) Chemical composition

Iron (Fe), DTPA chelated : 7%

c) Physical properties

Density : $0.6 - 0.7/\text{cm}^3$

pH : 5.0 - 0.7 (in 1.0% water solution)

Conductivity (CE) : 0.9 mS/cm (at 20 °C in 1.0% water solution)

Water insolubles : max 0.01 % Solubility in water : 750 g/l at 20 °C

Percentage of nutrients chelated: 100%

3. PRODUCT CHARACTERISTICS

- Micro granules; yellow
- Ammonium-free
- Protection of the micronutrient against precipitation in a moderate pH-range (pH 4 7)
- Intended for fertigation systems. Suitable for fertigation in high tech soilless systems and for open field irrigation
- Compatible with most water soluble fertilizers

4. RECOMMENDED APPLICATIONS & DOSING INSTRUCTIONS

Fertigation

| kg/1000 l water | Iron (Fe) content | |
|-----------------|--------------------|--------|
| | g/1000 I water/ppm | mmol/l |
| 1 | 70 | 1.3 |
| 5 | 350 | 6.3 |
| 10 | 700 | 12.5 |

Th pH in the tank should be above 4.

The mentioned indicated dosages and application stages are subject to soil and climatic conditions, influence of previous crops and other specific conditions. Exact dosage and application stages can only be given after an objective diagnostic procedure by e.g. soil, substrate and/or plant analyses.

5. PACKINGS

Available in packings of 1, 5, 25 and 1000 kg.

